As used herein and unless otherwise stated, the term "amino-acid" refers to a radical derived from a molecule having the chemical formula $H_2N–CHR^{22}–COOH$, wherein R^{22} is the side group of atoms characterizing the amino-acid type; said molecule may be one of the 20 naturally-occurring amino-acids or any non naturally-occurring amino-acid. Esters of amino acids included within this definition are substituted at one or more carboxyl groups with C_{1-6} alkyl. This is the case even when the amino acid is bonded through carboxyl because some amino acids contain more than one carboxyl groups, and in this case the unbonded carboxyl optionally is esterified.

R^{22} is C_1-C_6 alkyl or C1-C6 alkyl substituted with amino, carboxyl, amide, carboxyl (as well as esters, as noted above), hydroxyl, C_6-C_7 aryl, guanidinyl, imidazolyl, indolyl, sulfhydryl, sulfoxide, and/or alkylphosphate. R^{22} also is taken together with the amino acid αnitrogen to form a proline residue (R^{22} is $–(CH_2)_3$-). However, R^{22} is generally the side group of a naturally-occurring amino acid such as H, $-CH_3$, $-CH(CH_3)_2$, $-CH_2-CH(CH_3)_2$, $-CHCH_3-CH_2-CH_3$, $-CH_2-C_6H_5$, $-CH_2CH_2-S-CH_3$, $-CH_2OH$, $-CH(OH)-CH_3$, $-CH_2-SH$, $-CH_2-C_6H_4OH$, $-CH_2-CO-NH_2$, $-CH_2-CH_2-CO-NH_2$, $-CH_2-COOH$, $-CH_2-CH_2-COOH$, $-(CH_2)_4-NH_2$ and $-(CH_2)_3-NH-C(NH_2)-NH_2$. R^{22} also includes 1-guanidinoprop-3-yl, benzyl, 4-hydroxybenzyl, imidazol-4-yl, indol-3-yl, methoxyphenyl and ethoxyphenyl.

Optionally the amino acid residue is a hydrophobic residue such as mono-or di-alkyl or aryl amino acids, cycloalkylamino acids and the like. Optionally, the residue does not contain a sulfhydryl or guanidino substituent. Optionally, the amino acid is a phenolic amino acid.

Naturally-occurring amino acid residues are those residues found naturally in plants, animals or microbes, especially proteins thereof. Polypeptides most typically will be substantially composed of such naturally-occurring amino acid residues. These amino acids are glycine, alanine, valine, leucine, isoleucine, serine, threonine, cysteine, methionine, glutamic acid, aspartic acid, lysine, hydroxylysine, arginine, histidine, phenylalanine, tyrosine, tryptophan, proline, asparagine, glutamine and hydroxyproline. Additionally, unnatural amino acids, for example, valanine, phenylglycine and homoarginine are also included.

Substituents optionally are designated with or without bonds. Regardless of bond indications, if a substituent is polyvalent (based on its position in the structure referred to), then any and all possible orientations of the substituent are intended.

CLAIMS

1. Use of a glycopeptide antibiotic and derivatives thereof for the manufacture of a medicament for the treatment or prevention of viral infections.

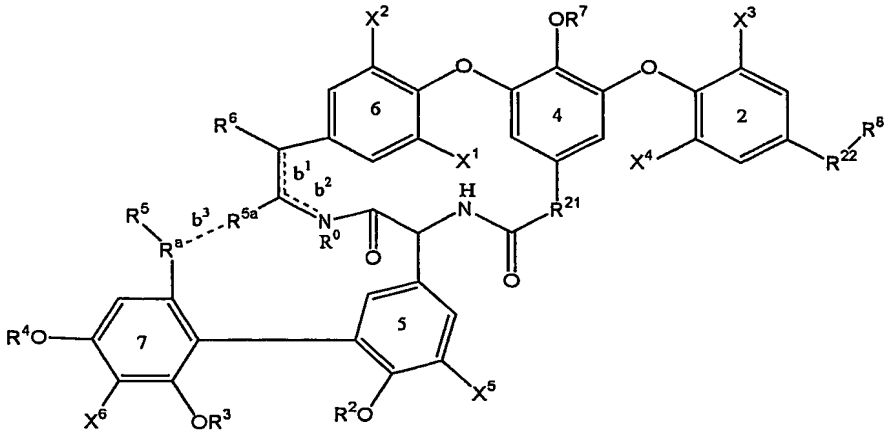
2. The use according to claim 1, wherein said viral infection is an infection of a virus belonging to the family of the Retroviridae, the Flaviviridae, the Herpesviridae or the Coronaviridae.

3. The use according to claim 1, wherein said viral infection is an infection of Human Immunodeficiency virus (HIV), Hepatitis C virus (HCV), the virus causing SARS, Herpes simplex virus (HSV-1 or 2), Cytomegalovirus (CMV), Varizella zoster virus (VZV), Feline corona virus (FCV) or Bovine viral diarrhoea virus (BVDV).

4. The use according to claim 1 to 3, wherein said glycopeptide antibiotic is selected from vancomycin, teicoplanin, eremomycin, chloroeremomycin, dechloroeremomycin, ristomycin, DA40926 and Demannosyl-DA40926.

5. The use according to claim 1 to 3, wherein said glycopeptide antibiotic is selected from teicoplanin and eremomycin.

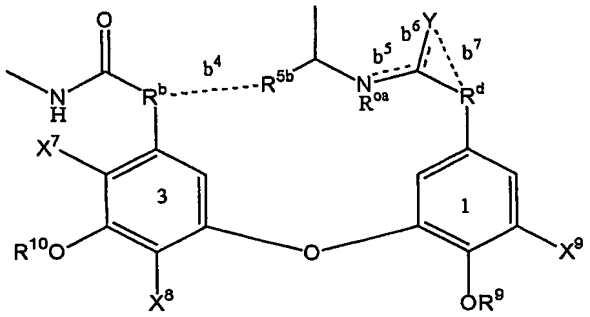
6. The use according to claim 1 to 3, wherein said glycopeptide antibiotic or derivatives thereof are of the formula Z,



Formula Z

wherein,

- R^{21} and R^{22} are taken together into $CHNH(CO)(CH_2)_nCHR^1NH(CO)RCH$ or in a structure as represented by formula A, or in the case R^{21} and R^{22} are not taken together, R^{21} represents R and R^{22} represents $-R^c-R^{5c}$;



Formula A

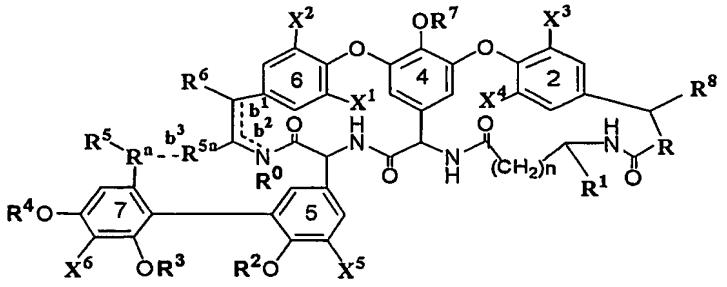
- each b^1 and b^2 independently represents nihil or an additional bond, while b^1 and b^2 can not be an additional bond at the same time, R^0 represents nihil when b^2 represents an additional bond and hydrogen when b^2 represents nihil, R^6 represents nihil when b^1 represents an additional bond and hydrogen when b^1 represents nihil, R^6 represents R^{6a} and R^0 represents hydrogen when b^1 and b^2 each represents nihil;
- b^3 represents nihil or an additional bond, R^a---R^{5a} represents a group of the formula $CHN(R^{11})CO$, $CHN(R^{11})(CH_2)_zN(R^{11a})CO$ or $CHN(R^{11})CO(CH_2)_zN(R^{11a})CO$ when b^3 represents an additional bond, and R^a is R and R^{5a} is R^5 when b^3 represents nihil, wherein z is 0, 1, 2, 3 or 4;
- b^4 represents nihil or an additional bond, R^b---R^{5b} represents a group of the formula $CHN(R^{11})CO$, $CHN(R^{11})(CH_2)_zN(R^{11a})CO$ or $CHN(R^{11})CO(CH_2)_pN(R^{11a})CO$ when b^4 represents an additional bond, and R^b is R and R^{5b} is R^5 when b^4 represents nihil, wherein p is 0, 1, 2, 3 or 4;
- each b^5, b^6 and b^7 independently represents nihil or an additional bond; Y represents oxygen, R^{0a} represents hydrogen and R^d represents R or a group of the formula $(CH_2)_qCON(R^{11})CH(CH_2OH)$ $(CH_2)_qN(R^{12})CH(CH_2OH)$ when b^5 and b^7 represent nihil and b^6 represents an additional bond. R^{0a} represents nihil, R^d---Y represents a group of the formula $CHN{=}C(NR^{11})O$ or $CHNHCON(R^{11})$ when b^6 represents nihil and b^5 represents an additional bond. Y and R^{0a} each represents a hydrogen and R^d represents group of the formula $(CH_2)_qCON(R^{11})CH(CH_2OH)$ $(CH_2)_qN(R^{12})CH(CH_2OH)$ when b^5, b^6 and b^7 each represents nihil, wherein q is 0, 1, 2, or 3 and n is 0, 1, 2 or 3;

- each X^1, X^2, X^3, X^4, X^5, X^7 and X^9 are independently selected from hydrogen, halogen and X^6;
- X^6 is selected from the group comprising hydrogen, halogen, SO_3H, OH, NO, NO_2, $NHNH_2$, $NHN=CHR^{11}$, $N=NR^{11}$, $CHR^{11}R^{13}$, $CH_2N(R^3)R^{11}$, R^5, R^{11} and R^{13}, wherein R^3 is CH_2 attached to the phenolic hydroxyl group of the 7th amino acid;
- X^8 is selected from hydrogen and alkyl;
- R^c represents R and R^{5c} represents R^5;
- R is selected from CHR^{13} and R^{14};
- R^1 is selected from hydrogen, R^{11}, $(CH_2)_tCOOH$, $(CH_2)_tCONR^{11}R^{12}$, $(CH_2)_tCOR^{13}$, $(CH_2)_tCOOR^{11}$, COR^{15}, $(CH_2)_tOH$, $(CH_2)_tCN$, $(CH_2)_tR^{13}$, $(CH_2)_tSCH_3$, $(CH_2)_tSOCH_3$, $(CH_2)_tS(O)_2CH_3$, $(CH_2)_t$phenyl(*m*-OH, *p*-Cl), $(CH_2)_t$phenyl(*o*-X^7, *m*-OR^{10}, *p*-X^8)-[O-phenyl(*o*-OR^9, *m*-X^9, *m*-R^{16})]-*m*, where t is 0, 1, 2, 3 or 4;
- each R^2 and R^4 are independently selected from hydrogen, R^{12} and R^{17};
- R^3 is selected from hydrogen, R^{12}, R^{17} and Sug;
- R^5 is selected from COOH, $COOR^{11}$, COR^{13}, COR^{15}, CH_2OH, CH_2halogen, CH_2R^{13}, CHO, $CH=NOR^{11}$, $CH=NNR^{11}R^{12}$ and $C=NNHCONR^{11}R^{12}$;
- R^{6a} is selected from OR^{12}, OR^{17}, OH, O-alkyl-Sug, O-alkenyl-Sug, O-alkynyl-Sug and O-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug;
- R^7 is selected from hydrogen, R^{12}, R^{17}, Sug and alkyl-Sug, alkenyl-Sug, alkynyl-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug.
- R^8 is selected from hydrogen, R^{12}, R^{17}, OH, O-alkyl-Sug, O-alkenyl-Sug, O-alkynyl-Sug and O-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug;
- R^9 is selected from hydrogen, R^{12}, R^{17} or Sug;
- R^{10} is selected from hydrogen, R^{12}, R^{17} or Sug, wherein Sug is any cyclic or acyclic carbohydrate;
- each R^{11}, R^{11a} and R^{11b} are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl, a heterocyclic ring, alkylphosphonate and alkylphosphonamide unsubstituted or substituted at the amide with alkyl, alkenyl or alkynyl, wherein each alkyl, alkylene, alkenyl, alkynyl,

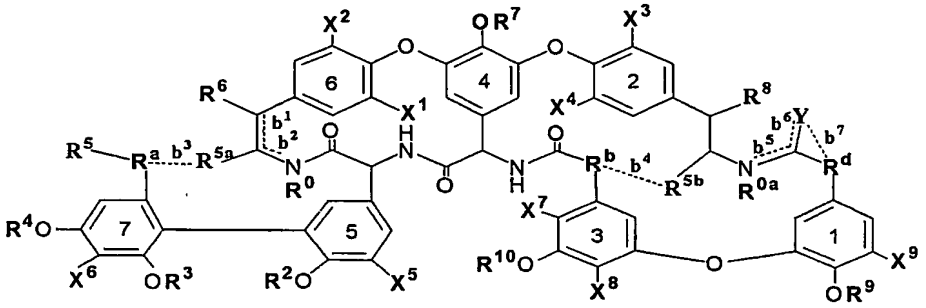
aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and heterocyclic ring can be substituted with 1 or more R^{19} or Sug;

- each R^{12} and R^{12a} are independently selected from the group consisting of hydrogen, acyl, amino-protecting group, carbamoyl, thiocarbamoyl, SO_2R^{11}, $S(O)R^{11}$, COR^{13}-R^{18}, $COCHR^{18}N(NO)R^{11}$, $COCHR^{18}NR^{11}R^{12}$ and $COCHR^{18}N^{+}R^{11}R^{11a}R^{11b}$, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring, wherein each alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring can be substituted with 1 or more R^{19} or Sug;
- R^{13} is selected from the group consisting of hydrogen, NHR^{12a}, $NR^{11}R^{12}$, $NR^{11}Sug$, $N^{+}R^{11}R^{11a}R^{11b}$, R^{15}, $NR^{11}C(R^{11a}R^{11b})COR^{15}$ and group of the formula N- A- N^{+}- A, wherein A is $-CH_2$-B-CH_2- and B is $-(CH_2)_m$-D-$(CH_2)_r$-, wherein m and r are from 1 to 4 and D is O, S, NR^{12}, $N^{+}R^{11}R^{11a}$;
- R^{14} is CH_2, C=O, CHOH, $C{=}NOR^{11}$, $CHNHOR^{11}$, $C{=}NNR^{11}R^{12}$, $C{=}NNHCONR^{11}R^{12}$ and $CHNHNR^{11}R^{12}$;
- R^{15} is selected from $N(R^{11})NR^{11a}R^{12}$, $N(R^{11})OR^{11a}$, $NR^{11}C(R^{11a}R^{11b})COR^{13}$;
- R^{16} is selected from a group of the formula R-R^5 or $CH(NH_2)CH_2OH$;
- R^{17} is selected from SO_3H, $SiR^{11}R^{11a}R^{11b}$, $SiOR^{11}OR^{11a}OR^{11b}$, $PR^{11}R^{11a}$, $P(O)R^{11}R^{11a}$, $P^{+}R^{11}R^{11a}R^{11b}$;
- R^{18} is selected from hydrogen, R^1, alkyl, aryl, phenyl-rhamnose-*p*, phenyl-(rhamnose-galactose)-*p*, phenyl-(galactose-galactose)-*p*, phenyl-O-methylrhamnose-*p*, wherein each alkyl and aryl can be substituted with 1 or more R^{19} or Sug,
- R^{19} is selected from hydrogen, halogen, SH, SR^{20}, OH, OR^{20}, COOH, COR^{20}, $COOR^{20}$ NO_2, NH_2, $N(R^{20})_2$ $NHC(NH_2){=}NH$, $CH(NH_2){=}NH$, NHOH, $NHNH_2$, N_3, NO, CN, $N{=}NR^{20}$, $N{=}NR^{12}$, SOR^{20}, SO_2R^{20}, PO_2OR^{20}, $PO_2N(R^{20})_2$, $B(OH)_2$, $B(OR^{20})_2$, CO, CHO, O-Sug, NR^{20}-Sug, R^{20}, R^{12}, R^{17} and R^{18} and each R^{19} can be substituted with 1 or more R^{20}.
- R^{20} is selected from hydrogen, halogen, SH, OH, COOH, NO_2, NH_2, $NHC(NH_2){=}NH$, $CH(NH_2){=}NH$, NHOH, $NHNH_2$, N_3, NO, CN, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring;

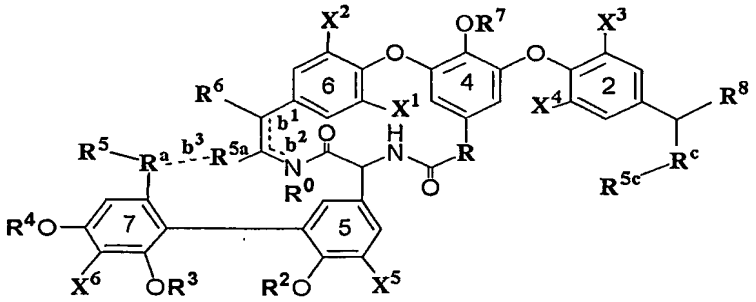
7. The use according to claim 1 to 3, wherein said glycopeptide antibiotic or derivatives thereof are of the formula I, II or III,



Formula I



Formula II



Formula III

wherein:

- each b^1 and b^2 independently represents nihil or an additional bond, while b^1 and b^2 can not be an additional bond at the same time, R^0 represents nihil when b^2 represents an additional bond and hydrogen when b^2 represents nihil, R^6 represents nihil when b^1 represents an additional bond and hydrogen when b^1 represents nihil, R^6 represents R^{6a} and R^0 represents hydrogen when b^1 and b^2 each represents nihil;

- b^3 represents nihil or an additional bond, R^a---R^{5a} represents a group of the formula $CHN(R^{11})CO$, $CHN(R^{11})(CH_2)_zN(R^{11a})CO$ or $CHN(R^{11})CO(CH_2)_zN(R^{11a})CO$ when b^3 represents an additional bond, and R^a is R and R^{5a} is R^5 when b^3 represents nihil, wherein z is 0, 1, 2, 3 or 4;
- b^4 represents nihil or an additional bond, R^b---R^{5b} represents a group of the formula $CHN(R^{11})CO$, $CHN(R^{11})(CH_2)_zN(R^{11a})CO$ or $CHN(R^{11})CO(CH_2)_pN(R^{11a})CO$ when b^4 represents an additional bond, and R^b is R and R^{5b} is R^5 when b^4 represents nihil, wherein p is 0, 1, 2, 3 or 4;
- each b^5, b^6 and b^7 independently represents nihil or an additional bond; Y represents oxygen, R^{0a} represents hydrogen and R^d represents R or a group of the formula $(CH_2)_qCON(R^{11})CH(CH_2OH)$ $(CH_2)_qN(R^{12})CH(CH_2OH)$ when b^5 and b^7 represent nihil and b^6 represents an additional bond. R^{0a} represents nihil, R^d---Y represents a group of the formula $CHN=C(NR^{11})O$ or $CHNHCON(R^{11})$ when b^6 represents nihil and b^5 represents an additional bond. Y and R^{0a} each represents a hydrogen and R^d represents group of the formula $(CH_2)_qCON(R^{11})CH(CH_2OH)$ $(CH_2)_qN(R^{12})CH(CH_2OH)$ when b^5, b^6 and b^7 each represents nihil, wherein q is 0, 1, 2, or 3 and n is 0, 1, 2 or 3;
- each X^1, X^2, X^3, X^4, X^5, X^7 and X^9 are independently selected from hydrogen, halogen and X^6;
- X^6 is selected from the group comprising hydrogen, halogen, SO_3H, OH, NO, NO_2, $NHNH_2$, $NHN=CHR^{11}$, $N=NR^{11}$, $CHR^{11}R^{13}$, $CH_2N(R^3)R^{11}$, R^5, R^{11} and R^{13}, wherein R^3 is CH_2 attached to the phenolic hydroxyl group of the 7th amino acid;
- X^8 is selected from hydrogen and alkyl;
- R^c represents R and R^{5c} represents R^5;
- R is selected from CHR^{13} and R^{14};
- R^1 is selected from hydrogen, R^{11}, $(CH_2)_tCOOH$, $(CH_2)_tCONR^{11}R^{12}$, $(CH_2)_tCOR^{13}$, $(CH_2)_tCOOR^{11}$, COR^{15}, $(CH_2)_tOH$, $(CH_2)_tCN$, $(CH_2)_tR^{13}$, $(CH_2)_tSCH_3$, $(CH_2)_tSOCH_3$, $(CH_2)_tS(O)_2CH_3$, $(CH_2)_t$phenyl(*m*-OH, *p*-CI), $(CH_2)_t$phenyl(*o*-X^7, *m*-OR^{10}, *p*-X^8)-[O-phenyl(*o*-OR^9, *m*-X^9, *m*-R^{16})]-*m*, where t is 0, 1, 2, 3 or 4;
- each R^2 and R^4 are independently selected from hydrogen, R^{12} and R^{17};
- R^3 is selected from hydrogen, R^{12}, R^{17} and Sug;
- R^5 is selected from COOH, $COOR^{11}$, COR^{13}, COR^{15}, CH_2OH, CH_2halogen, CH_2R^{13}, CHO, $CH=NOR^{11}$, $CH=NNR^{11}R^{12}$ and $C=NNHCONR^{11}R^{12}$;

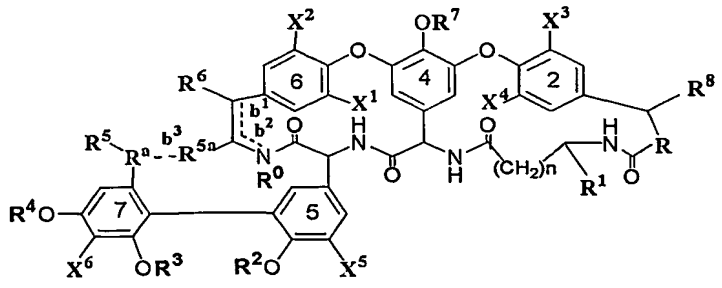
- R^{6a} is selected from OR^{12}, OR^{17}, OH, O-alkyl-Sug, O-alkenyl-Sug, O-alkynyl-Sug and O-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug;
- R^7 is selected from hydrogen, R^{12}, R^{17}, Sug and alkyl-Sug, alkenyl-Sug, alkynyl-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug.
- R^8 is selected from hydrogen, R^{12}, R^{17}, OH, O-alkyl-Sug, O-alkenyl-Sug, O-alkynyl-Sug and O-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug;
- R^9 is selected from hydrogen, R^{12}, R^{17} or Sug;
- R^{10} is selected from hydrogen, R^{12}, R^{17} or Sug, wherein Sug is any cyclic or acyclic carbohydrate;
- each R^{11}, R^{11a} and R^{11b} are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl, a heterocyclic ring, alkylphosphonate (e.g. alkylenePO_2OH) and alkylphosphonamide unsubstituted or substituted at the amide with alkyl, alkenyl or alkynyl (e.g alkylenePO_2NH_2), wherein each alkyl, alkylene, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and heterocyclic ring can be substituted with 1 or more R^{19} or Sug;
- each R^{12} and R^{12a} are independently selected from the group consisting of hydrogen, acyl, amino-protecting group, carbamoyl, thiocarbamoyl, SO_2R^{11}, $S(O)R^{11}$, COR^{13}-R^{18}, $COCHR^{18}N(NO)R^{11}$, $COCHR^{18}NR^{11}R^{12}$ and $COCHR^{18}N^+R^{11}R^{11a}R^{11b}$, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring, wherein each alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring can be substituted with 1 or more R^{19} or Sug;
- R^{13} is selected from the group consisting of hydrogen, NHR^{12a}, $NR^{11}R^{12}$, NR^{11}Sug, $N^+R^{11}R^{11a}R^{11b}$, R^{15}, $NR^{11}C(R^{11a}R^{11b})COR^{15}$ and group of the formula N- A- N^+- A, wherein A is $-CH_2$-B-CH_2- and B is $-(CH_2)_m$-D-$(CH_2)_r$-, wherein m and r are from 1 to 4 and D is O, S, NR^{12}, $N^+R^{11}R^{11a}$;
- R^{14} is CH_2, C=O, CHOH, $C{=}NOR^{11}$, $CHNHOR^{11}$, $C{=}NNR^{11}R^{12}$, $C{=}NNHCONR^{11}R^{12}$ and $CHNHNR^{11}R^{12}$;
- R^{15} is selected from $N(R^{11})NR^{11a}R^{12}$, $N(R^{11})OR^{11a}$, $NR^{11}C(R^{11a}R^{11b})COR^{13}$;

- R^{16} is selected from a group of the formula R-R^5 or $CH(NH_2)CH_2OH$;
- R^{17} is selected from SO_3H, $SiR^{11}R^{11a}R^{11b}$, $SiOR^{11}OR^{11a}OR^{11b}$, $PR^{11}R^{11a}$, $P(O)R^{11}R^{11a}$, $P^+R^{11}R^{11a}R^{11b}$;
- R^{18} is selected from hydrogen, R^1, alkyl, aryl, phenyl-rhamnose-*p*, phenyl-(rhamnose-galactose)-*p*, phenyl-(galactose-galactose)-*p*, phenyl-O-methylrhamnose-*p*, wherein each alkyl and aryl can be substituted with 1 or more R^{19} or Sug,
- R^{19} is selected from hydrogen, halogen, SH, SR^{20}, OH, OR^{20}, COOH, COR^{20}, $COOR^{20}$ NO_2, NH_2, $N(R^{20})_2$ $NHC(NH_2)=NH$, $CH(NH_2)=NH$, NHOH, $NHNH_2$, N_3, NO, CN, $N=NR^{20}$, $N=NR^{12}$, SOR^{20}, SO_2R^{20}, PO_2OR^{20}, $PO_2N(R^{20})_2$, $B(OH)_2$, $B(OR^{20})_2$, CO, CHO, O-Sug, NR^{20}-Sug, R^{20}, R^{12}, R^{17} and R^{18} and each R^{19} can be substituted with 1 or more R^{20};
- R^{20} is selected from hydrogen, halogen, SH, OH, COOH, NO_2, NH_2, $NHC(NH_2)=NH$, $CH(NH_2)=NH$, NHOH, $NHNH_2$, N_3, NO, CN, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring.

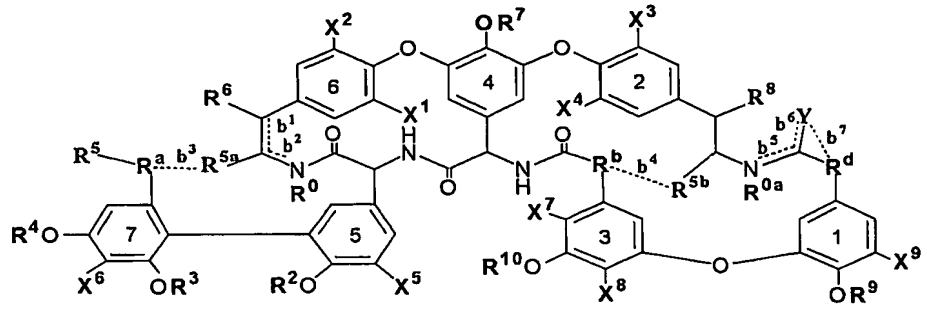
8. Use of a glycopeptide antibiotic derivative for the manufacture of a medicament for the treatment or prevention of viral infections.

9. The use according to claim 1 to 7, wherein said glycopeptide antibiotic or derivatives thereof are selected from the group consisting of the compounds with the code 1 to 172 in the description of this application.

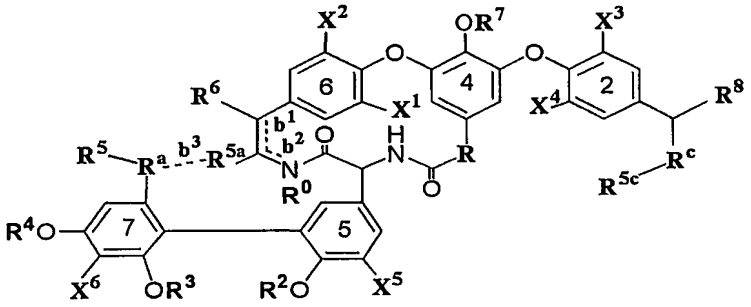
10. A glycopeptide antibiotic derivative according to formula I, II or III:



Formula I



Formula II



Formula III

wherein:

- each b^1 and b^2 independently represents nihil or an additional bond, while b^1 and b^2 can not be an additional bond at the same time, R^0 represents nihil when b^2 represents an additional bond and hydrogen when b^2 represents nihil, R^6 represents nihil when b^1 represents an additional bond and hydrogen when b^1 represents nihil, R^6 represents R^{6a} and R^0 represents hydrogen when b^1 and b^2 each represents nihil;
- b^3 represents nihil or an additional bond, R^a---R^{5a} represents a group of the formula $CHN(R^{11})CO$, $CHN(R^{11})(CH_2)_zN(R^{11a})CO$ or $CHN(R^{11})CO(CH_2)_zN(R^{11a})CO$ when b^3 represents an additional bond, and R^a is R and R^{5a} is R^5 when b^3 represents nihil, wherein z is 0, 1, 2, 3 or 4;
- b^4 represents nihil or an additional bond, R^b---R^{5b} represents a group of the formula $CHN(R^{11})CO$, $CHN(R^{11})(CH_2)_zN(R^{11a})CO$ or $CHN(R^{11})CO(CH_2)_pN(R^{11a})CO$ when b^4 represents an additional bond, and R^b is R and R^{5b} is R^5 when b^4 represents nihil, wherein p is 0, 1, 2, 3 or 4;

- each b^5, b^6 and b^7 independently represents nihil or an additional bond; Y represents oxygen, R^{0a} represents hydrogen and R^d represents R or a group of the formula $(CH_2)_qCON(R^{11})CH(CH_2OH)$ $(CH_2)_qN(R^{12})CH(CH_2OH)$ when b^5 and b^7 represent nihil and b^6 represents an additional bond. R^{0a} represents nihil, R^d---Y represents a group of the formula $CHN=C(NR^{11})O$ or $CHNHCON(R^{11})$ when b^6 represents nihil and b^5 represents an additional bond. Y and R^{0a} each represents a hydrogen and R^d represents group of the formula $(CH_2)_qCON(R^{11})CH(CH_2OH)$ $(CH_2)_qN(R^{12})CH(CH_2OH)$ when b^5, b^6 and b^7 each represents nihil, wherein q is 0, 1, 2, or 3 and n is 0, 1, 2 or 3;
- each X^1, X^2, X^3, X^4, X^5, X^7 and X^9 are independently selected from hydrogen, halogen and X^6;
- X^6 is selected from the group comprising hydrogen, halogen, SO_3H, OH, NO, NO_2, $NHNH_2$, $NHN=CHR^{11}$, $N=NR^{11}$, $CHR^{11}R^{13}$, $CH_2N(R^3)R^{11}$, R^5, R^{11} and R^{13}, wherein R^3 is CH_2 attached to the phenolic hydroxyl group of the 7th amino acid;
- X^8 is selected from hydrogen and alkyl;
- R^c represents R and R^{5c} represents R^5;
- R is selected from CHR^{13} and R^{14};
- R^1 is selected from hydrogen, R^{11}, $(CH_2)_tCOOH$, $(CH_2)_tCONR^{11}R^{12}$, $(CH_2)_tCOR^{13}$, $(CH_2)_tCOOR^{11}$, COR^{15}, $(CH_2)_tOH$, $(CH_2)_tCN$, $(CH_2)_tR^{13}$, $(CH_2)_tSCH_3$, $(CH_2)_tSOCH_3$, $(CH_2)_tS(O)_2CH_3$, $(CH_2)_t$phenyl(*m*-OH, *p*-Cl), $(CH_2)_t$phenyl(*o*-X^7, *m*-OR^{10}, *p*-X^8)-[O-phenyl(*o*-OR^9, *m*-X^9, *m*-R^{16})]-*m*, where t is 0, 1, 2, 3 or 4;
- each R^2 and R^4 are independently selected from hydrogen, R^{12} and R^{17};
- R^3 is selected from hydrogen, R^{12}, R^{17} and Sug;
- R^5 is selected from COOH, $COOR^{11}$, COR^{13}, COR^{15}, CH_2OH, CH_2halogen, CH_2R^{13}, CHO, $CH=NOR^{11}$, $CH=NNR^{11}R^{12}$ and $C=NNHCONR^{11}R^{12}$;
- R^{6a} is selected from OR^{12}, OR^{17}, OH, O-alkyl-Sug, O-alkenyl-Sug, O-alkynyl-Sug and O-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug;
- R^7 is selected from hydrogen, R^{12}, R^{17}, Sug and alkyl-Sug, alkenyl-Sug, alkynyl-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug.
- R^8 is selected from hydrogen, R^{12}, R^{17}, OH, O-alkyl-Sug, O-alkenyl-Sug, O-alkynyl-Sug and O-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug;

- R^9 is selected from hydrogen, R^{12}, R^{17} or Sug;
- R^{10} is selected from hydrogen, R^{12}, R^{17} or Sug, wherein Sug is any cyclic or acyclic carbohydrate;
- each R^{11}, R^{11a} and R^{11b} are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl, a heterocyclic ring, alkylphosphonate (e.g. alkylenePO_2OH) and alkylphosphonamide unsubstituted or substituted at the amide with alkyl, alkenyl or alkynyl (e.g alkylenePO_2NH_2), wherein each alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and heterocyclic ring can be substituted with 1 or more R^{19} or Sug;
- each R^{12} and R^{12a} are independently selected from the group consisting of hydrogen, acyl, amino-protecting group, carbamoyl, thiocarbamoyl, SO_2R^{11}, $S(O)R^{11}$, COR^{13}-R^{18}, $COCHR^{18}N(NO)R^{11}$, $COCHR^{18}NR^{11}R^{12}$ and $COCHR^{18}N^+R^{11}R^{11a}R^{11b}$, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring, wherein each alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring can be substituted with 1 or more R^{19} or Sug;
- R^{13} is selected from the group consisting of hydrogen, NHR^{12a}, $NR^{11}R^{12}$, NR^{11}Sug, $N^+R^{11}R^{11a}R^{11b}$, R^{15}, $NR^{11}C(R^{11a}R^{11b})COR^{15}$ and group of the formula N- A- N^+- A, wherein A is $-CH_2$-B-CH_2- and B is $-(CH_2)_m$-D-$(CH_2)_r$-, wherein m and r are from 1 to 4 and D is O, S, NR^{12}, $N^+R^{11}R^{11a}$;
- R^{14} is CH_2, C=O, CHOH, $C=NOR^{11}$, $CHNHOR^{11}$, $C=NNR^{11}R^{12}$, $C=NNHCONR^{11}R^{12}$ and $CHNHNR^{11}R^{12}$;
- R^{15} is selected from $N(R^{11})NR^{11a}R^{12}$, $N(R^{11})OR^{11a}$, $NR^{11}C(R^{11a}R^{11b})COR^{13}$;
- R^{16} is selected from a group of the formula R-R^5 or $CH(NH_2)CH_2OH$;
- R^{17} is selected from SO_3H, $SiR^{11}R^{11a}R^{11b}$, $SiOR^{11}OR^{11a}OR^{11b}$, $PR^{11}R^{11a}$, $P(O)R^{11}R^{11a}$, $P^+R^{11}R^{11a}R^{11b}$;
- R^{18} is selected from hydrogen, R^1, alkyl, aryl, phenyl-rhamnose-*p*, phenyl-(rhamnose-galactose)-*p*, phenyl-(galactose-galactose)-*p*, phenyl-O-methylrhamnose-*p*, wherein each alkyl and aryl can be substituted with 1 or more R^{19} or Sug,
- R^{19} is selected from hydrogen, halogen, SH, SR^{20}, OH, OR^{20}, COOH, COR^{20}, $COOR^{20}$ NO_2, NH_2, $N(R^{20})_2$ $NHC(NH_2)=NH$, $CH(NH_2)=NH$, NHOH, $NHNH_2$, N_3, NO, CN,

$N{=}NR^{20}$, $N{=}NR^{12}$, SOR^{20}, SO_2R^{20}, PO_2OR^{20}, $PO_2N(R^{20})_2$, $B(OH)_2$, $B(OR^{20})_2$, CO, CHO, O-Sug, NR^{20}-Sug, R^{20}, R^{12}, R^{17} and R^{18} and each R^{19} can be substituted with 1 or more R^{20};

- R^{20} is selected from hydrogen, halogen, SH, OH, COOH, NO_2, NH_2, $NHC(NH_2){=}NH$, $CH(NH_2){=}NH$, NHOH, $NHNH_2$, N_3, NO, CN, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring.

11. The derivative according to claim 10, wherein:

- each b^1 and b^2 represent nihil, R^6 represents R^{6a} and R^0 represents hydrogen;
- b^3 represents an additional bond and R^a---R^{5a} represents CHNHCO;
- b^4 represents nihil or an additional bond, R^b---R^{5b} represents a group of the formula $CHN(R^{11})CO$, $CHN(R^{11})(CH_2)_zN(R^{11a})CO$ or $CHN(R^{11})CO(CH_2)_pN(R^{11a})CO$ when b^4 represents an additional bond, and R^b is R and R^{5b} is R^5 when b^4 represents nihil, wherein p is 0, 1, 2, 3 or 4;
- each b^5, b^6 and b^7 independently represents nihil or an additional bond; Y represents oxygen, R^{0a} represents hydrogen and R^d represents R or a group of the formula $(CH_2)_qCON(R^{11})CH(CH_2OH)$ $(CH_2)_qN(R^{12})CH(CH_2OH)$ when b^5 and b^7 represent nihil and b^6 represents an additional bond. R^{0a} represents nihil, R^d---Y represents a group of the formula $CHN{=}C(NR^{11})O$ or $CHNHCON(R^{11})$ when b^6 represents nihil and b^5 represents an additional bond. Y and R^{0a} each represents a hydrogen and R^d represents group of the formula $(CH_2)_qCON(R^{11})CH(CH_2OH)$ $(CH_2)_qN(R^{12})CH(CH_2OH)$ when b^5, b^6 and b^7 each represents nihil, wherein q is 0, 1, 2, or 3 and n is 0, 1, 2 or 3;
- each X^1, X^2, X^3, X^4, X^5, X^7 and X^9 are independently selected from hydrogen and halogen;
- X^6 is CH_2R^{13};
- X^8 is selected from hydrogen and methyl;
- R^c represents R and R^{5c} represents R^5;
- R is CHR^{13};
- R^1 is selected from the group consisting of hydrogen, R^{11}, $(CH_2)_tCOOH$, $(CH_2)_tCONR^{11}R^{12}$, $(CH_2)_tCOR^{13}$, $(CH_2)_tCOOR^{11}$, COR^{15}, $(CH_2)_tOH$, $(CH_2)_tCN$, $(CH_2)_tR^{13}$, $(CH_2)_tSCH_3$, $(CH_2)_tSOCH_3$, $(CH_2)_tS(O)_2CH_3$, $(CH_2)_t$phenyl(*m*-OH, *p*-Cl), $(CH_2)_t$phenyl(*o*-X^7, *m*-OR^{10}, *p*-X^8)-[O-phenyl(*o*-OR^9, *m*-X^9, *m*-R^{16})]-*m*, where t is 0, 1, 2, 3 or 4;
- each R^2 and R^4 are independently selected from hydrogen, R^{12} and R^{17};
- R^3 is selected from hydrogen, R^{12}, R^{17}, mannosyl and O-acetylmanosyl;

- R^5 is selected from COOH, $COOR^{11}$, COR^{13}, COR^{15}, CH_2OH, CH_2halogen, CH_2R^{13}, CHO, $CH=NOR^{11}$, $CH=NNR^{11}R^{12}$ and $C=NNHCONR^{11}R^{12}$;
- R^{6a} is selected from OR^{12}, OR^{17}, OH, O-alkyl-Sug, O-alkenyl-Sug, O-alkynyl-Sug and O-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug and Sug is selected from glucosyl, ristosaminyl, N-acetylglucosaminyl, 4-*epi*-vancosaminyl, 3-*epi*-vancosaminyl, vancosaminyl, actinosaminyl, glucuronyl, 4-oxovancosaminyl, ureido-4-oxovancosaminyl and their derivatives;
- R^7 is selected from hydrogen, R^{12}, R^{17}, Sug and alkyl-Sug, alkenyl-Sug, alkynyl-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug, wherein Sug is selected from glucosyl, mannosyl, ristosaminyl, N-acylglucosaminyl, N-acylglucuronyl, glucosaminyl, glucuronyl, 4-*epi*-vancosaminyl, 3-*epi*-vancosaminyl, vancosaminyl, actinosaminyl, acosaminyl, glucosyl-vancosaminyl, glucosyl-4-*epi*-vancosaminyl, glucosyl-3-*epi*-vancosaminyl, glucosyl-acosaminyl, glucosyl-ristosaminyl, glucosyl-actinosaminyl, glucosyl-rhamnosyl, glucosyl-olivosyl, glucosyl-mannosyl, glucosyl-4-oxovancosaminyl, glucosyl-ureido-4-oxovancosaminyl, glucosyl(rhamnosyl)-mannosyl-arabinosyl, glucosyl-2-O-Leu and their derivatives.
- R^8 is selected from hydrogen, R^{12}, R^{17}, OH, O-alkyl-Sug, O-alkenyl-Sug, O-alkynyl-Sug and O-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug, wherein Sug is selected from mannosyl, galactosyl and galactosyl-galactosyl;
- R^9 is selected from hydrogen, R^{12}, R^{17}, galactosyl and galactosyl-galactosyl;
- R^{10} is selected from hydrogen, R^{12}, R^{17}, mannosyl or fucosyl;
- each R^{11}, R^{11a} and R^{11b} are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring, wherein each alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring can be substituted with 1 or more R^{19} or Sug;
- R^{12} is selected from the group consisting of hydrogen, acyl, amino-protecting group, carbamoyl, thiocarbamoyl, SO_2R^{11}, $S(O)R^{11}$, COR^{13}-R^{18}, $COCHR^{18}N(NO)R^{11}$, $COCHR^{18}NR^{11}R^{12}$ and $COCHR^{18}N^{+}R^{11}R^{11a}R^{11b}$, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring, wherein each alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring can be substituted with 1 or more R^{19} or Sug;

- R^{12a} is selected from the group consisting of hydrogen, $COCHR^{18}NR^{11}R^{12}$, $COCHR^{18}N(NO)R^{11}$, $COCHR^{18}N^{+}R^{11}R^{11a}R^{11b}$ and $COCHR^{18}R^{13}$;
- R^{13} is selected from the group consisting of hydrogen, NHR^{12a}, $NR^{11}R^{12}$, $NR^{11}Sug$, $N^{+}R^{11}R^{11a}R^{11b}$, R^{15}, $NR^{11}C(R^{11a}R^{11b})COR^{15}$ and a group of the formula N- A- N^{+}- A, wherein A is $-CH_2$-B-CH_2- and B is $-(CH_2)_m$-D-$(CH_2)_r$-, wherein m and r are from 1 to 4 and D is O, S, NR^{12}, $N^{+}R^{11}R^{11a}$;
- R^{14} is CH_2, C=O, CHOH, $C{=}NOR^{11}$, $CHNHOR^{11}$, $C{=}NNR^{11}R^{12}$, $C{=}NNHCONR^{11}R^{12}$ and $CHNHNR^{11}R^{12}$;
- R^{15} is selected from $N(R^{11})NR^{11a}R^{12}$, $N(R^{11})OR^{11a}$, $NR^{11}C(R^{11a}R^{11b})COR^{13}$;
- R^{16} is selected from a group of the formula R-R^5 or $CH(NH_2)CH_2OH$;
- R^{17} is selected from SO_3H, $SiR^{11}R^{11a}R^{11b}$, $SiOR^{11}OR^{11a}OR^{11b}$, $PR^{11}R^{11a}$, $P(O)R^{11}R^{11a}$, $P^{+}R^{11}R^{11a}R^{11b}$;
- R^{18} is selected from hydrogen, R^1, CH_3, $CH_2CH(CH_3)_2$, phenyl(*p*-OH, *m*-Cl), phenyl-rhamnose-*p*, phenyl-(rhamnose-galactose)-*p*, phenyl-(galactose-galactose)-*p*, phenyl-O-methylrhamnose-*p*;
- R^{19} is selected from hydrogen, halogen, SH, SR^{20}, OH, OR^{20}, COOH, COR^{20}, $COOR^{20}$ NO_2, NH_2, $N(R^{20})_2$ $NHC(NH_2){=}NH$, $CH(NH_2){=}NH$, NHOH, $NHNH_2$, N_3, NO, CN, $N{=}NR^{20}$, $N{=}NR^{12}$, SOR^{20}, SO_2R^{20}, PO_2OR^{20}, $PO_2N(R^{20})_2$, $B(OH)_2$, $B(OR^{20})_2$, CO, CHO, O-Sug, NR^{20}-Sug, R^{20}, R^{12}, R^{17} and R^{18} and each R^{19} can be substituted with 1 or more R^{20};
- R^{20} is selected from hydrogen, halogen, SH, OH, COOH, NO_2, NH_2, $NHC(NH_2){=}NH$, $CH(NH_2){=}NH$, NHOH, $NHNH_2$, N_3, NO, CN, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring.

12. The derivative according to claim 10 and 11, wherein the derivative is not a compound of the group of compounds referred to with the codes 1 to 55 in the description of this application.

13. The derivative according to claim 10 and 11, selected from the group of compounds referred to with the codes 56 to 172 in the description of this application.

14. A composition containing a glycopeptide antibiotic or derivatives thereof according to claim 10 as an active ingredient.

15. A composition for separate, combined or sequential use in the treatment or prophylaxis of anti-viral infections, comprising
    a) one or more compounds according to claim 10, and,
    b) one or more compounds effective in the treatment or prophylaxis of viral infections, including Retroviral, Flaviviral, Herpes or Coronaviral enzyme or entry inhibitors,

    in proportions such as to provide a synergistic effect in the said treatment or prophylaxis.

16. Use of a composition as in claim 14 and 15 for the treatment and prevention of viral infections.

17. The use of the derivatives of any one of the claims 10 to 13 for the manufacture of a medicament for the treatment or prevention of viral infections.

18. A method for preventing or treating a viral infections in a subject or patient by administering to the patient in need thereof a therapeutically effective amount of one or more glycopeptide antibiotics or derivatives thereof.

19. A method according to claim 18, wherein said glycopeptide antibiotics or derivatives are selected from formula I, II and III,

    wherein:

- each b^1 and b^2 independently represents nihil or an additional bond, while b^1 and b^2 can not be an additional bond at the same time, R^0 represents nihil when b^2 represents an additional bond and hydrogen when b^2 represents nihil, R^6 represents nihil when b^1 represents an additional bond and hydrogen when b^1 represents nihil, R^6 represents R^{6a} and R^0 represents hydrogen when b^1 and b^2 each represents nihil;
- b^3 represents nihil or an additional bond, R^a---R^{5a} represents a group of the formula $CHN(R^{11})CO$, $CHN(R^{11})(CH_2)_zN(R^{11a})CO$ or $CHN(R^{11})CO(CH_2)_zN(R^{11a})CO$ when b^3 represents an additional bond, and R^a is R and R^{5a} is R^5 when b^3 represents nihil, wherein z is 0, 1, 2, 3 or 4;
- b^4 represents nihil or an additional bond, R^b---R^{5b} represents a group of the formula $CHN(R^{11})CO$, $CHN(R^{11})(CH_2)_zN(R^{11a})CO$ or $CHN(R^{11})CO(CH_2)_pN(R^{11a})CO$ when b^4 represents an additional bond, and R^b is R and R^{5b} is R^5 when b^4 represents nihil, wherein p is 0, 1, 2, 3 or 4;

- each b^5, b^6 and b^7 independently represents nihil or an additional bond; Y represents oxygen, R^{0a} represents hydrogen and R^d represents R or a group of the formula $(CH_2)_qCON(R^{11})CH(CH_2OH)$ $(CH_2)_qN(R^{12})CH(CH_2OH)$ when b^5 and b^7 represent nihil and b^6 represents an additional bond. R^{0a} represents nihil, R^d---Y represents a group of the formula $CHN=C(NR^{11})O$ or $CHNHCON(R^{11})$ when b^6 represents nihil and b^5 represents an additional bond. Y and R^{0a} each represents a hydrogen and R^d represents group of the formula $(CH_2)_qCON(R^{11})CH(CH_2OH)$ $(CH_2)_qN(R^{12})CH(CH_2OH)$ when b^5, b^6 and b^7 each represents nihil, wherein q is 0, 1, 2, or 3 and n is 0, 1, 2 or 3;
- each X^1, X^2, X^3, X^4, X^5, X^7 and X^9 are independently selected from hydrogen, halogen and X^6;
- X^6 is selected from the group comprising hydrogen, halogen, SO_3H, OH, NO, NO_2, $NHNH_2$, $NHN=CHR^{11}$, $N=NR^{11}$, $CHR^{11}R^{13}$, $CH_2N(R^3)R^{11}$, R^5, R^{11} and R^{13}, wherein R^3 is CH_2 attached to the phenolic hydroxyl group of the 7th amino acid;
- X^8 is selected from hydrogen and alkyl;
- R^c represents R and R^{5c} represents R^5;
- R is selected from CHR^{13} and R^{14};
- R^1 is selected from hydrogen, R^{11}, $(CH_2)_tCOOH$, $(CH_2)_tCONR^{11}R^{12}$, $(CH_2)_tCOR^{13}$, $(CH_2)_tCOOR^{11}$, COR^{15}, $(CH_2)_tOH$, $(CH_2)_tCN$, $(CH_2)_tR^{13}$, $(CH_2)_tSCH_3$, $(CH_2)_tSOCH_3$, $(CH_2)_tS(O)_2CH_3$, $(CH_2)_t$phenyl(*m*-OH, *p*-Cl), $(CH_2)_t$phenyl(*o*-X^7, *m*-OR^{10}, *p*-X^8)-[O-phenyl(*o*-OR^9, *m*-X^9, *m*-R^{16})]-*m*, where t is 0, 1, 2, 3 or 4;
- each R^2 and R^4 are independently selected from hydrogen, R^{12} and R^{17};
- R^3 is selected from hydrogen, R^{12}, R^{17} and Sug;
- R^5 is selected from COOH, $COOR^{11}$, COR^{13}, COR^{15}, CH_2OH, CH_2halogen, CH_2R^{13}, CHO, $CH=NOR^{11}$, $CH=NNR^{11}R^{12}$ and $C=NNHCONR^{11}R^{12}$;
- R^{6a} is selected from OR^{12}, OR^{17}, OH, O-alkyl-Sug, O-alkenyl-Sug, O-alkynyl-Sug and O-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug;
- R^7 is selected from hydrogen, R^{12}, R^{17}, Sug and alkyl-Sug, alkenyl-Sug, alkynyl-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug.
- R^8 is selected from hydrogen, R^{12}, R^{17}, OH, O-alkyl-Sug, O-alkenyl-Sug, O-alkynyl-Sug and O-Sug, wherein each alkyl, alkenyl and alkynyl can be unsubstituted or substituted with 1 or more R^{19} or Sug;

- R^9 is selected from hydrogen, R^{12}, R^{17} or Sug;
- R^{10} is selected from hydrogen, R^{12}, R^{17} or Sug, wherein Sug is any cyclic or acyclic carbohydrate;
- each R^{11}, R^{11a} and R^{11b} are independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring, wherein each alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring can be substituted with 1 or more R^{19} or Sug;
- each R^{12} and R^{12a} are independently selected from the group consisting of hydrogen, acyl, amino-protecting group, carbamoyl, thiocarbamoyl, SO_2R^{11}, $S(O)R^{11}$, COR^{13}-R^{18}, $COCHR^{18}N(NO)R^{11}$, $COCHR^{18}NR^{11}R^{12}$ and $COCHR^{18}N^+R^{11}R^{11a}R^{11b}$, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring, wherein each alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring can be substituted with 1 or more R^{19} or Sug;
- R^{13} is selected from the group consisting of hydrogen, NHR^{12a}, $NR^{11}R^{12}$, $NR^{11}Sug$, $N^+R^{11}R^{11a}R^{11b}$, R^{15}, $NR^{11}C(R^{11a}R^{11b})COR^{15}$ and group of the formula N- A- N^+- A, wherein A is $-CH_2$-B-CH_2- and B is $-(CH_2)_m$-D-$(CH_2)_r$-, wherein m and r are from 1 to 4 and D is O, S, NR^{12}, $N^+R^{11}R^{11a}$;
- R^{14} is CH_2, C=O, CHOH, $C=NOR^{11}$, $CHNHOR^{11}$, $C=NNR^{11}R^{12}$, $C=NNHCONR^{11}R^{12}$ and $CHNHNR^{11}R^{12}$;
- R^{15} is selected from $N(R^{11})NR^{11a}R^{12}$, $N(R^{11})OR^{11a}$, $NR^{11}C(R^{11a}R^{11b})COR^{13}$;
- R^{16} is selected from a group of the formula R-R^5 or $CH(NH_2)CH_2OH$;
- R^{17} is selected from SO_3H, $SiR^{11}R^{11a}R^{11b}$, $SiOR^{11}OR^{11a}OR^{11b}$, $PR^{11}R^{11a}$, $P(O)R^{11}R^{11a}$, $P^+R^{11}R^{11a}R^{11b}$;
- R^{18} is selected from hydrogen, R^1, alkyl, aryl, phenyl-rhamnose-*p*, phenyl-(rhamnose-galactose)-*p*, phenyl-(galactose-galactose)-*p*, phenyl-O-methylrhamnose-*p*, wherein each alkyl and aryl can be substituted with 1 or more R^{19} or Sug,
- R^{19} is selected from hydrogen, halogen, SH, SR^{20}, OH, OR^{20}, COOH, COR^{20}, $COOR^{20}$ NO_2, NH_2, $N(R^{20})_2$ $NHC(NH_2)=NH$, $CH(NH_2)=NH$, NHOH, $NHNH_2$, N_3, NO, CN, $N=NR^{20}$, $N=NR^{12}$, SOR^{20}, SO_2R^{20}, PO_2OR^{20}, $PO_2N(R^{20})_2$, $B(OH)_2$, $B(OR^{20})_2$, CO, CHO, O-Sug, NR^{20}-Sug, R^{20}, R^{12}, R^{17} and R^{18} and each R^{19} can be substituted with 1 or more R^{20};

- R^{20} is selected from hydrogen, halogen, SH, OH, COOH, NO_2, NH_2, $NHC(NH_2)=NH$, $CH(NH_2)=NH$, NHOH, $NHNH_2$, N_3, NO, CN, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, cyloalkyl, cycloalkenyl, cycloalkynyl and a heterocyclic ring.

20. A method of screening antiviral compounds which comprises
    a) providing glycopeptide antibiotics or derivatives thereof, and,
    b) determining the anti-viral activity of said compound.

21. A method for selecting antiviral glycopeptide antibiotics and derivatives thereof which comprises,
    a) providing glycopeptide antibiotics or derivatives thereof, and
    b) determining the anti-viral and the anti-bacterial activity and the cell toxicity of said compound, and
    c) selecting the compound with the best anti-viral activity, the lowest anti-bacterial activity and the lowest cell toxicity.

22. The derivative according to claims 10 to 13, for use as a medicine.